

REPORT ON THE MYCOLOGICAL DIAGNOSTIC LABORATORY THE QUEEN'S UNIVERSITY OF BELFAST, 1960

By D. W. R. MACKENZIE, B.Sc., Ph.D.,
L. CORKIN, and HILARY BELL

THIS is the second annual report of the Mycological Diagnostic Service and covers the work done during 1960. After September, 1960, the laboratory was incorporated into the Queen's University Department of Microbiology without any change in the scope or function of the diagnostic service. The laboratory continued to offer to general practitioners, hospital laboratories, and clinics a routine service for the isolation and identification of fungi associated with humans.

During 1960 mycological examinations were made on 1,376 specimens from 897 patients, received from 26 hospitals or clinics, or from practices in Northern Ireland. Almost 98 per cent. of the specimens received came from dermatological clinics or practices, those originating from general practice accounting for only 2.2 per cent. of the total number received. Pathogenic fungi were cultured on 350 occasions from 237 patients, but an additional 50 specimens showed the presence of fungi by microscopy alone.

RINGWORM.

As in 1959, ringworm fungi were the most common group, accounting for 271 (77.5 per cent.) of the 350 pathogenic fungi obtained in culture. Details are shown in Table 1.

TABLE 1.
SPECIES OF RINGWORM FUNGI ISOLATED 1959-1960.

SPECIES	NUMBER ISOLATED			
	1959		1960	
<i>Trichophyton verrucosum</i>	-	-	40	52
<i>Trichophyton sulfureum</i>	-	-	48	37
<i>Microsporum canis</i>	-	-	42	27
<i>Trichophyton mentagrophytes</i>	-	-	11	19
<i>Trichophyton interdigitale</i>	-	-	10	10
<i>Trichophyton rubrum</i>	-	-	19	16
<i>Epidermophyton floccosum</i>	-	-	12	13
<i>Trichophyton persicolor</i>	-	-	-	1
Others	-	-	3	-
TOTAL				175

T. sulfureum was again the most common organism isolated from scalp infections of children, and probably remains its most common cause in Northern Ireland (Beare, 1958). Specimens were received from more girls than boys, in the ratio of 2.33:1. Unlike 1959, the high number of infections amongst girls was not dependent on the discovery of an outbreak at a girls' school.

A marked reduction in the number of isolates of *M. canis* is evident, and in the first six months of 1960 only six new patients with this infection were confirmed. No material from adult infections was received.

Inflammatory ringworm of the body of three children caused by *T. mentagrophytes* was found to have originated from pet white mice.

T. persicolor, a rare species, was isolated on one occasion from a lesion on the lip of a 47-year-old woman, this apparently being the first isolation in Northern Ireland.

Cattle ringworm (*T. verrucosum*) was the most common fungus, ringworm or otherwise, isolated in the laboratory usually from lesions on the hands, forearms, body, and scalp of individuals living in rural communities. Seven cases of tinea barbæ were confirmed.

OTHER PATHOGENIC FUNGI.

Candida albicans was isolated from 41 patients as follows: nails (9 occasions), foot, i.e. interdigital clefts (8), perineum (6), tongue (6), genitalia (4), faeces (2), sputum (1), pharynx (1), and scalp (1). Several other pathogenic yeasts were isolated, including *C. tropicalis* (3), *C. parapsilosis* (2), and *Geotrichum candidum* (1).

Malassezia furfur, the cause of pityriasis versicolor, was recorded on eight occasions. Fungi associated primarily with middle ear infections included *Aspergillus fumigatus*, *A. flavus*, *A. niger* and *A. versicolor*. *Scopulariopsis brevicaulis*, a species of apparently low pathogenicity, was isolated on two occasions, from a finger lesion and a superficial infection of the eyelid.

Keratinomyces ajelloi, an organism related to ringworm fungi and capable of experimental infection in humans was isolated from household dust at the home of a child with a *T. sulfureum* scalp infection. Several subsequent isolates of this fungus were made, again constituting a new record for Northern Ireland.

REFERENCE.

BEARE, J. M. (1958). *Mycopathologia*, 9, 65.